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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/551,520

06/08/2006

Amine Benachenhou

16297-1US JP/mp

6082

20988

7590

06/09/2009

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CANADA

EXAMINER

POPOVICS, ROBERT J

ART UNIT

PAPER NUMBER

1797

MAIL DATE

DELIVERY MODE

06/09/2009

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/551,520	<b>Applicant(s)</b> BENACHENHOU, AMINE	
	<b>Examiner</b> /Robert James Popovics/	<b>Art Unit</b> 1797	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

#### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

#### Status

- 1) ☒ Responsive to communication(s) filed on 6/20/08, 12/19/08 and 2/27/09.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

#### Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-17, 19-36, 38-43, 45-53 and 55-58 is/are pending in the application.
- 4a) Of the above claim(s) 7, 13, 14, 19, 24, 32-34, 39, 40, 45, 49 and 50 is/are withdrawn from consideration.
- 5) ☒ Claim(s) 8, 35 and 36 is/are allowed.
- 6) ☒ Claim(s) 1-6, 9, 10, 12, 15-17, 20-23, 25-31, 38, 41-43, 46-48, 51-53 and 55-58 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

#### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 19 December 2008 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

#### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

#### Attachment(s)

- |                                                                                                            |                                                                                         |
|------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

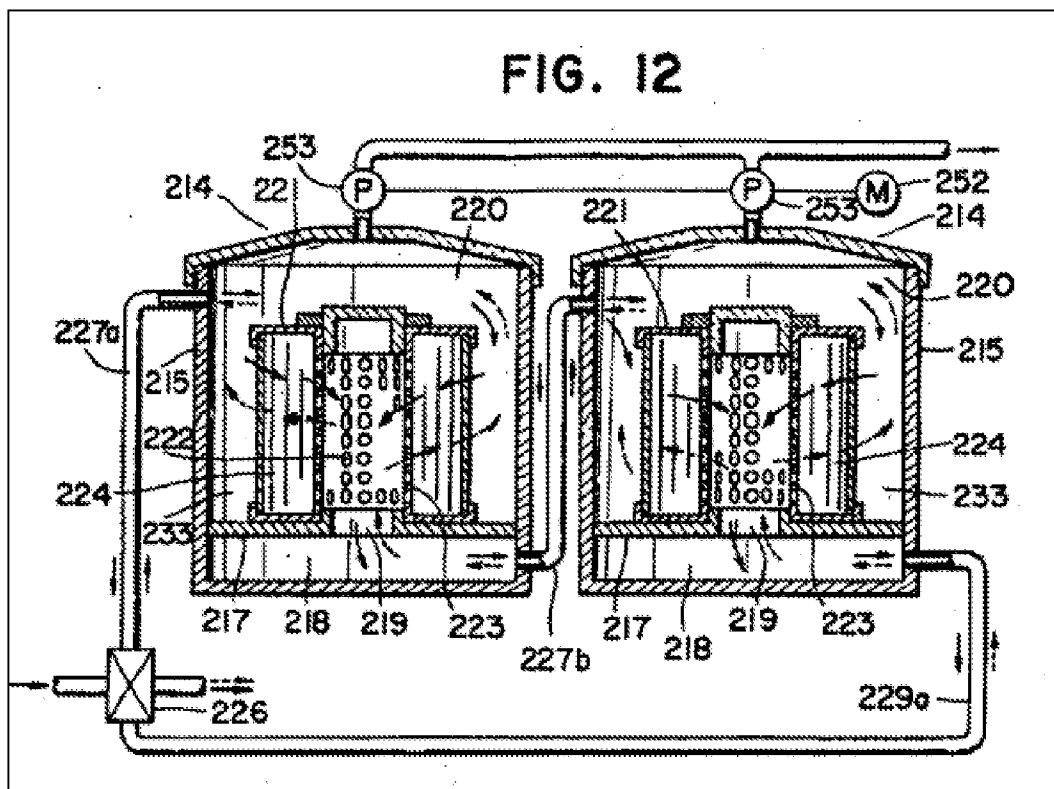
## DETAILED ACTION

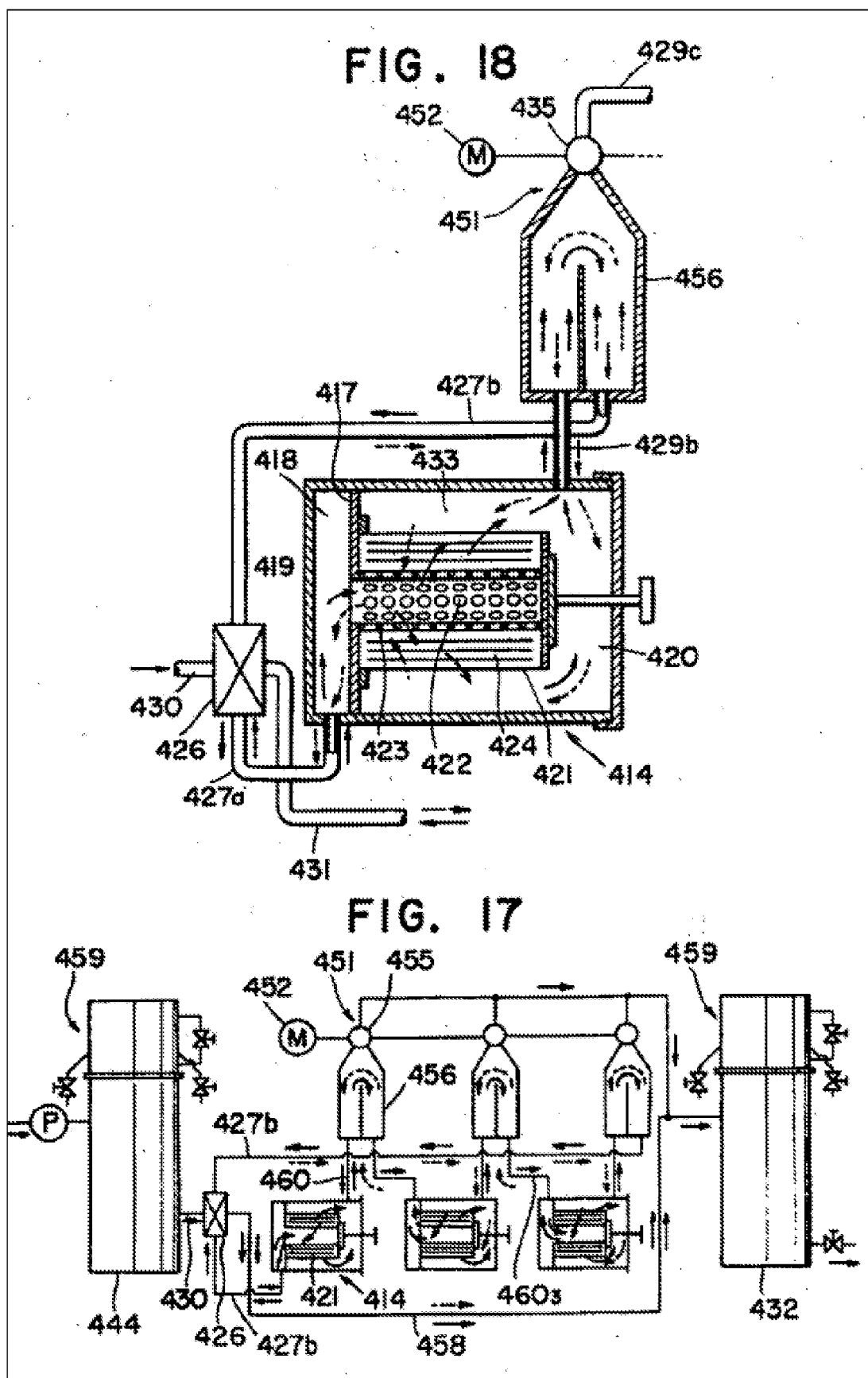
### *Claim Rejections - 35 USC § 102*

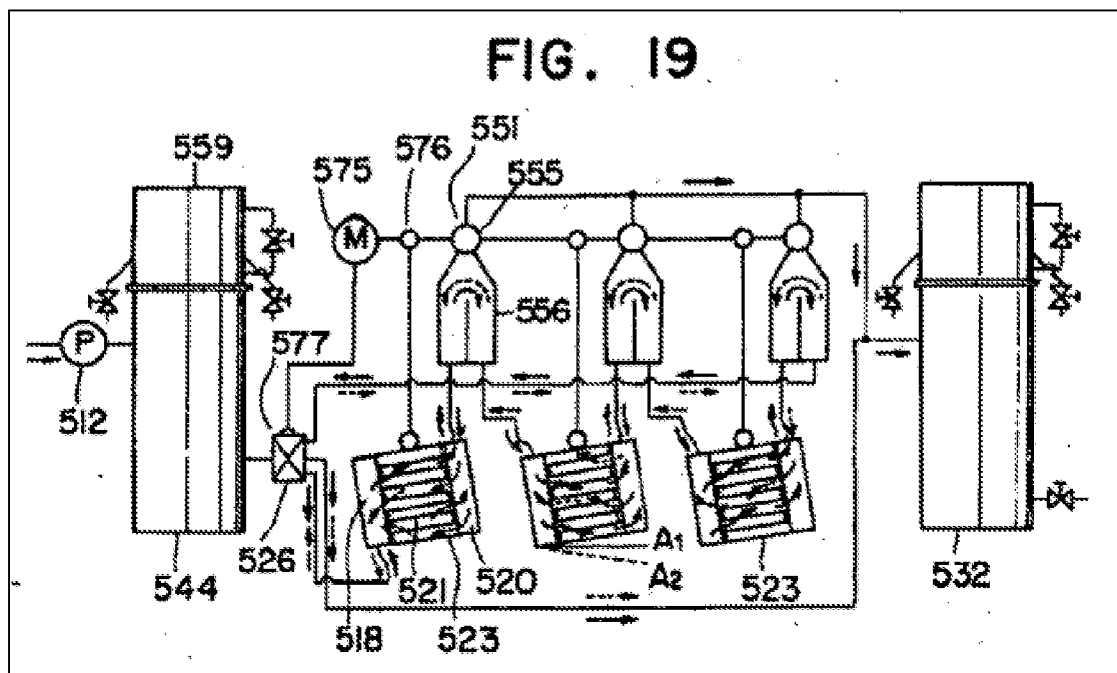
Claims **1-6,9-10,12,15-17,20-23,25-31,38,41-43,46-48,51-53** and **55-58** are rejected under 35 U.S.C. 103(a) as obvious over the combined teachings of **GB 2,083,370** and **WO 02/20115**. See figures **12** and **17-19** of **GB 2,083,370**.

From **GB 2,083,370**:

**(57) A method and apparatus for oil-water separation utilises a coalescing element having a coalescing layer of polymeric gel applied to a porous base, the layer being water-insoluble and oil-repelling to coalesce dispersed oil. The direction of flow through the element is periodically reversed to prevent clogging, and the coalesced oil is separated from the water in a downstream settling tank.**







From page three of **Applicant's PG Pub**:

[0038] The principal physical property differences between the preferred absorbent of the invention and that of the prior art (WO 02/20115), are the percentage void space and the homogeneity of the porous mass. The preferred absorbent has at least one of the properties listed in Table 1 and preferably a plurality of properties listed in Table 1.

It would have been obvious to those skilled in the art to employ the **known absorbent**, of **WO 02/20115**, or a **modified version thereof**, in the system of **GB 2,083,370** because of its known ability to treat/separate emulsions. The parameters that are asserted to differentiate this known material from Applicant's "**preferred absorbent**," are, **in the absence of a clear showing of unexpected results specifically associated therewith**, seen to constitute parameters that would have been routinely manipulated/optimized by those skilled in the art, in order to address varying process conditions, such as varying percent compositions, particle diameter,

etc. Accordingly, the language of the claims, is not seen to patentably distinguish over the combination of **GB 2,083,370** and **WO 02/20115**.

### ***Election/Restrictions***

Applicant's elections **WITHOUT** traverse are acknowledged:

#### **Election/Restrictions**

The Applicant respectfully submits that the claims on file have unity of invention under article PCT Rule 13.1.

However, in response to the election of species requirement raised in the Office Action of September 22, 2008, the Applicant submits the following elections without traverse. Each of the species established by the Examiner will be discussed individually for clarity. The Applicant submits that claims 1, 2, 21, 22, 35 and 36 are generic.

#### **Coalescing Media Species**

The Applicant elects polyurethane as the species for the coalescing media and therefore withdraws claims 19 and 45 (claims 20 and 46 have been amended to correct the dependency). The elected species of coalescing media encompasses the remaining intervening claims on file.

#### **Operating Mode**

The Applicant elects the discontinuous mode and therefore withdraws claims 7 and 24, and amended claims 6 and 23. The selected operating mode encompasses the remaining intervening claims on file.

#### **Drawings Configuration of Species**

The Applicant elects the configuration of Figure 1 and therefore withdraws claims 31, 33 and 34. The selected configuration encompasses the remaining intervening claims on file.

#### **State of the Porous Mass**

The Applicant elects the compressed species of porous mass. Therefore, claims 13, 14, 39, 40, 49 and 50 have been withdrawn. The selected species encompasses the remaining intervening claims on file.

**Response to Arguments**

Applicant's arguments filed **June 20, 2008** have been fully considered but they are not persuasive.

Applicant has asserted that, ***“the statement made in the GB'370 application (on page 1, lines 84 to 86) ‘of removing oil .matters, of granules having a particle size smaller than 10 $\mu$ ’ must be considered; at best, an overstatement and at worst, incorrect.”*** The undersigned cannot dismiss the teachings of a reference based upon Applicant's mere allegations. In an effort to bolster the allegation, Applicant has referenced a publication, and has kindly provided a copy of a table from said publication. A table from a paper, without a copy of the paper is of little value, for as is the case with virtually all publications containing tables, the table is explained in the paper. And even if the paper were produced, it would be of little probative value, as Applicant's assertion, ***“had the GB'370 reference Successfully treated particles smaller than 10g, a paper presented nearly twenty years later, would likely have included this information, which is not the case. The Applicant submits that in 2001 (before the priority date of the present application) the general knowledge suggested that only particles greater than 5  $\mu$ m could be separated by a mesh coalescer and a media filter, and not particles smaller than 10 $\mu$ m,”*** would not be found persuasive. The writers of that paper may simply have not been aware of all of the vast teachings of the art.

Where is the **data/evidence** supporting the following allegation?

The claims on file as presently amended in the present application, include an important feature of “uniform sized open cells with a cell diameter of 160 to 220 $\mu$ m”. This feature is not found in either of the cited references. This feature allows the present invention to substantially surpass the performance of the absorbent material of WO'115 by trapping particles of 0.5 $\mu$ m or more.



Comparing Applicant's Figures 3 & 4, little, if any difference between the two media is seen. The specification spends considerable time comparing alleged differences in properties, yet does not appear to make a single comparison of performance of the two media. If Applicant intends to persist along this line of argument, then a Declaration under Section 132 should be considered, comparing the performance of Applicant's media with that of **WO 02/20115**. If **unexpectedly better performance** is obtained using Applicant's media and it can be clearly demonstrated, withdrawal of the obvious type rejection may be warranted. It is noted that the instant claims do not specify performance. Applicant's arguments appear to conflate efficacy with efficiency. How many **0.5  $\mu$ m** droplets are removed in a single pass? Contrary to Applicants assertions, some **0.5  $\mu$ m** droplets will impinge the surface of media with very large pore sizes. In this regard, chicken wire would meet the limitation "**can** separate non-aqueous emulsions from the aqueous phase having a droplet diameter of **at least 0.5  $\mu$ m** . Any experimental data must be commensurate in scope with the claims. And of course, new matter is prohibited!

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication should be directed to /Robert James Popovics/ at telephone number (571) 272-1164.

**//Robert James Popovics/  
Primary Examiner  
Art Unit 1797**

**Search Notes**

Application/Control No.

10/551,520

Examiner

Robert James Popovics

Applicant

BENACHENHOU

Art Unit

1797

**SEARCHED**

Class	Subclass	Date	Examiner

**INTERFERENCE SEARCHED**

☐ PGPUB search conducted; search logic is attached.

Date: \_\_\_\_\_ Initials: \_\_\_\_\_

**SEARCH NOTES  
(INCLUDING SEARCH STRATEGY)**

	DATE	EXMR
Text Search Conducted.	9-29-07	RJP
Text Search Conducted.	3-17-08	RJP
Text Search Conducted.	6-7-09	/RJP/